APPLICABLE CODES AND STANDARDS:
2012 INTERNATIONAL BUILDING CODE
ACI 318-05

DESIGN LIVE LOADS _____ PSF
LATERAL IMPACT LOAD - 4000 LB VEHICLE TRAVELING @ 30 MPH

MAXIMUM ALLOWABLE SOIL BEARING CAPACITY 1500 PSF

MATERIAL DATA:

CONCRETE & REINFORCING
CONCRETE STRENGTH (fc @ 28 DAYS)
FOUNDATIONS 3000 PSI

CEMENT TYPE	PORTLAND TYPE I
AGGREGATES	REGULAR WT. HARDROCK TYPE - ASTM C33
REINFORCING STEEL	ASTM A615, GRADE 60

STRUCTURAL NOTES:

GENERAL:

ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE APPLICABLE BUILDING CODE.

THE STRUCTURE HAS BEEN DESIGNED TO RESIST DESIGN LOADS ONLY AS A COMPLETED STRUCTURE. APPLICATION OF ANY LOADS TO THE PARTIALLY COMPLETED STRUCTURE SHALL BE CONSIDERED BY THE CONTRACTOR AND SO INCLUDED IN THE DESIGN OF SHORING, BRACING, FORMWORK, AND ANY OTHER SUPPORTING ELEMENTS PROVIDED FOR CONSTRUCTION OF THE STRUCTURE.

DETAILS ON THE DRAWINGS INDICATED AS "TYPICAL" APPLY IN ALL AREAS WHERE CONDITIONS SIMILAR TO THE DETAIL OCCUR.

THE STRUCTURAL DRAWINGS ARE NOT INTENDED FOR USE AS SHOP ERECTION DRAWINGS. REPRODUCTION OF THESE DRAWINGS IN LIEU OF PREPARATION OF SHOP ERECTION DRAWINGS SIGNIFIES THE USERS' ACCEPTANCE THAT ALL INFORMATION SHOWN IS CORRECT AND APPROPRIATE FOR SHOP DRAWINGS AND THAT THE USER WILL BE FULLY RESPONSIBLE FOR EXPENSES THAT MAY OCCUR FROM SAID ACCEPTANCE.

COORDINATION / VERIFICATION:

CHECK AND VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS AND REPORT ANY DISCREPANCIES TO THE ENGINEER BEFORE PROCEEDING WITH ANY PHASE OF THE WORK.

ANY PROPRIETARY STRUCTURAL SYSTEMS THAT ARE COMPOSED OF COMPONENTS TO BE FIELD ERECTED SHALL BE SUPERVISED BY THE SUPPLIER DURING MANUFACTURING, DELIVERY, HANDLING, STORAGE, AND ERECTION IN ACCORDANCE WITH THE INSTRUCTIONS PREPARED BY THE SUPPLIER.

CROSS REFERENCE STRUCTURAL DRAWINGS WITH MECHANICAL AND ELECTRICAL DRAWINGS, AND WITH ACTUAL EQUIPMENT SUPPLIED TO THE PROJECT, FOR THE LOCATION AND SIZE OF ALL SLAB OPENINGS, SLEEVES, INSERTS, FLOOR DEPRESSIONS, BLOCK-OUTS, CURBS, ANCHORS, BOLTS, ETC. REQUIRED FOR INSTALLATION.

REFER TO ARCHITECTURAL DRAWINGS FOR ALL SURFACE FINISHES.

CONCRETE / REINFORCING:

CONCRETE BATCH DESIGN(S) SHALL BE PROPORTIONED AND PRODUCED IN ACCORDANCE WITH A.C.I. 318, IN PARTICULAR CHAPTER 5, AND A.C.I. 301. MIX AND DELIVER IN ACCORDANCE WITH ASTM C94.

SLUMP REQUIREMENTS:	
FOUNDATIONS	MIN. 1 IN. / MAX. 4 IN.
AIR ENTRAINMENT	CONCRETE EXPOSED TO WEATHER _ 5% MIN.
ADMIXTURES	SUBMIT AS REQUIRED FOR APPROVAL
FLY ASH	NOT ALLOWED

CONCRETE TEST CYLINDERS:

SAMPLING IN FIELD	ASTM C172 & C31
CYLINDER STRENGTH TESTS	ASTM C39

FREQUENCY OF STRENGTH TESTS ONE PER 100 CU. YDS. OR MIN. ONCE PER DAY FOR EACH TYPE OF MIX
ONE STRENGTH TEST = AVG. STRENGTHS OF TWO CYLINDERS @ 28 DAYS.
CYLINDERS TO BE TESTED: 2 @ 7 DAYS, 2 @ 28 DAYS.

CONSTRUCTION JOINTS MUST HAVE PRIOR REVIEW BY THE ENGINEER. ALL CONTINUOUS REINFORCING SHALL BE CARRIED THROUGH THE JOINT.
LOCATIONS:
FND WALLS AND FOOTINGS MIDWAY BETWEEN BOLLARDS

EXPOSED CORNERS: PROVIDE A 3/4" CHAMFER AT ALL EXPOSED CONCRETE CORNERS.

CURING: CONCRETE SHALL BE MAINTAINED IN A MOIST CONDITION FOR A MINIMUM OF SEVEN DAYS AFTER ITS PLACEMENT. IF FORMWORK IS REMOVED PRIOR TO SEVEN DAYS, APPLY MOIST CURING TO NEWLY EXPOSED SURFACES. APPROVED CURING COMPOUNDS MAY BE USED IN LIEU OF MOIST CURING.

REINFORCING BAR WELDING: ABSOLUTELY NO WELDING OF REINFORCING BARS OR TORCHING TO BEND REINFORCING BARS SHALL BE ALLOWED WITHOUT THE SPECIFIC APPROVAL OF THE ENGINEER.

MINIMUM CONCRETE CLEAR COVER:
PROVIDE THE FOLLOWING MINIMUM CONCRETE COVER OVER REINFORCING (FACE OF CONCRETE TO EDGE OF BAR) UNLESS DETAILED OTHERWISE ON DRAWINGS:

CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3"
CONCRETE EXPOSED TO EARTH OR WEATHER NO. 6 THROUGH NO. 18 BARS	2"
NO. 5 BAR, W31 OR D31 WIRE & SMALLER	1-1/2"

BAR SUPPORT ACCESSORIES SHALL BE PROVIDED IN ACCORDANCE WITH THE LATEST A.C.I. MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES
BEAM REINFORCING ON BAR BOLSTERS @ 4 FT. O.C. MAX.

NO ROCKS, CLAY TILE, OR CLAY BRICK SHALL BE USED TO SUPPORT REINFORCING.

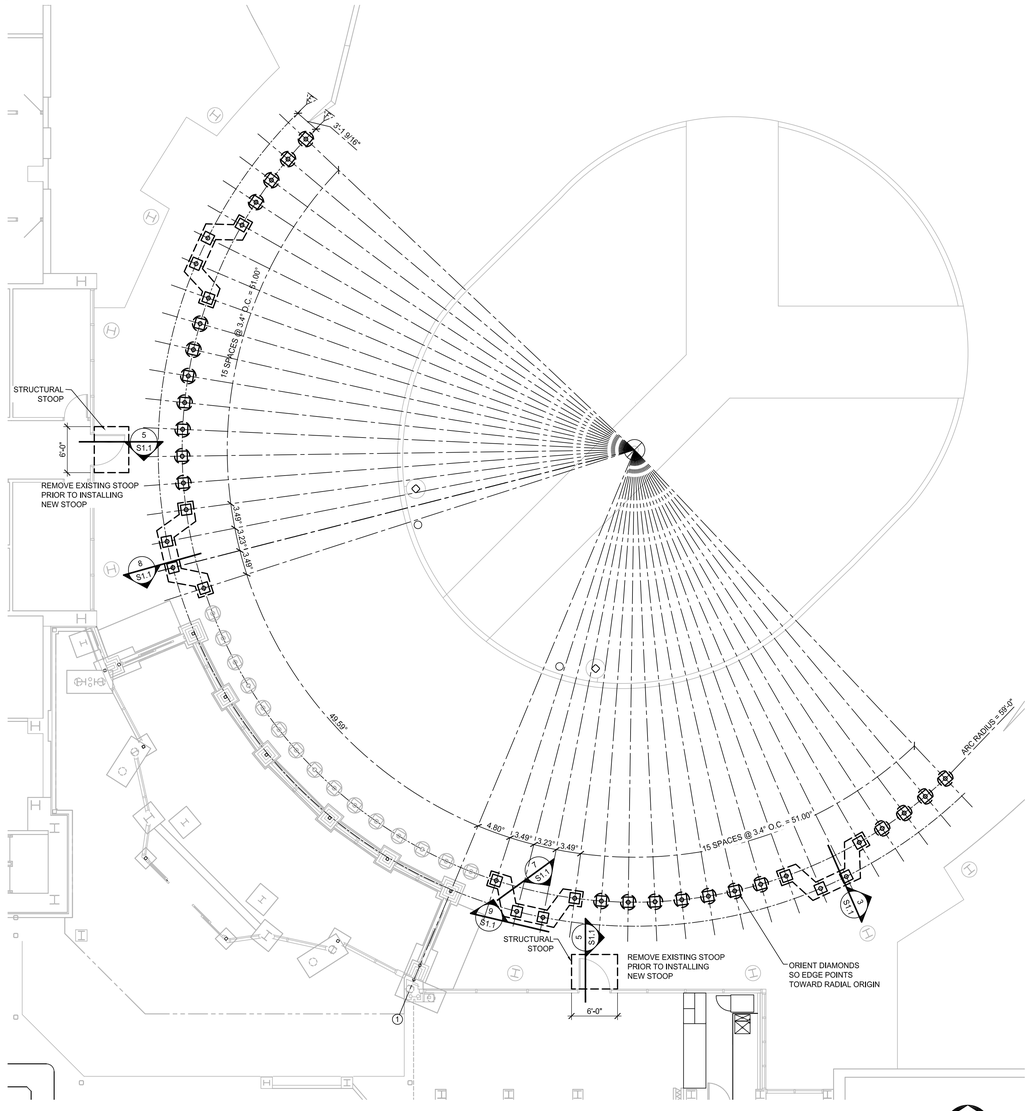
REINFORCING SHOP DRAWINGS: REINFORCING SUPPLIER SHALL PROVIDE COMPLETE PLACEMENT AND FABRICATION DRAWINGS FOR ALL REINFORCING INCLUDING THE LOCATION AND SIZE OF ALL ACCESSORIES AND SUPPORTS.

FOUNDATIONS:

SPREAD FOOTINGS SHALL BE PLACED ON NEAT, CLEAN AND DRY EXCAVATIONS. EXTREME CARE SHALL BE TAKEN WHEN EXCAVATING NEAR THE BEARING SURFACE. FOOT TRAFFIC SHALL BE KEPT TO A MINIMUM NECESSARY TO PLACE THE FOOTING REINFORCEMENT AND CONCRETE.

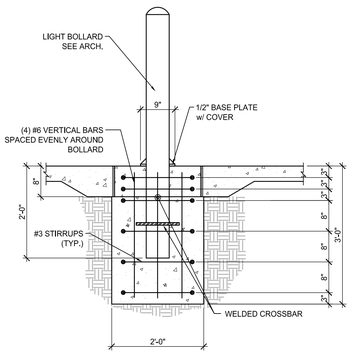
THE CONTRACTOR SHALL PROVIDE FOR ADEQUATE DRAINAGE OF SURFACE WATER AWAY FROM THE STRUCTURE AND EXCAVATED AREAS DURING CONSTRUCTION. THIS INCLUDES NECESSARY PUMPING, TRENCHING, BACKFILL AND/OR DIKE CONSTRUCTION.

1 GENERAL NOTES
SCALE: NO SCALE

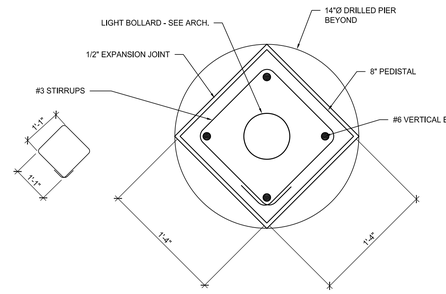


2 FOUNDATION PLAN
SCALE: 1/8" = 1'-0"

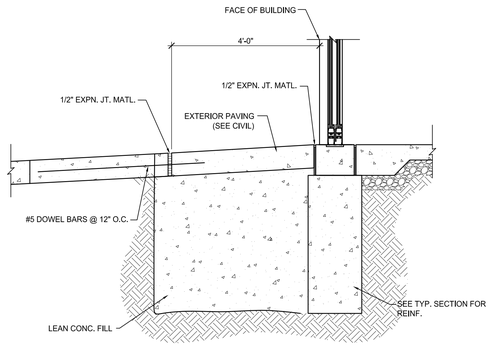
NORTH



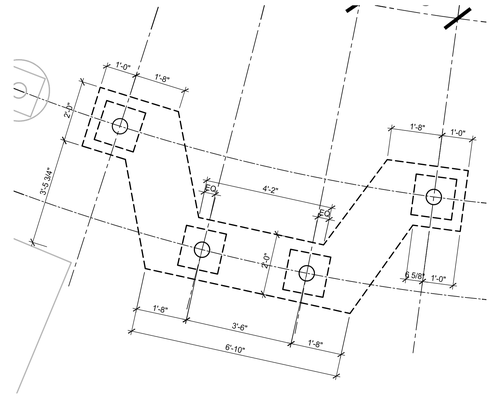
3 TYPICAL FOUNDATION SECTION
SCALE: 3/4" = 1'-0"



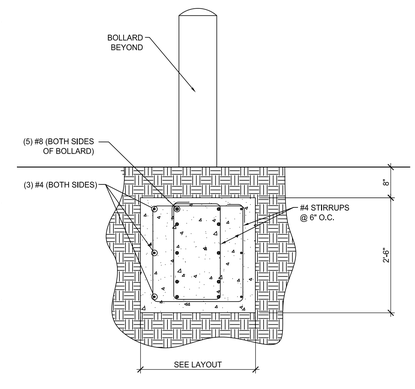
4 TYPICAL FOUNDATION PLAN
SCALE: 1 1/2" = 1'-0"



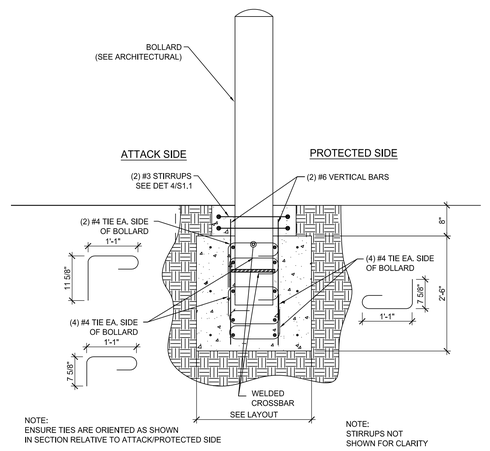
5 TYPICAL STOOP DETAIL
SCALE: 3/4" = 1'-0"



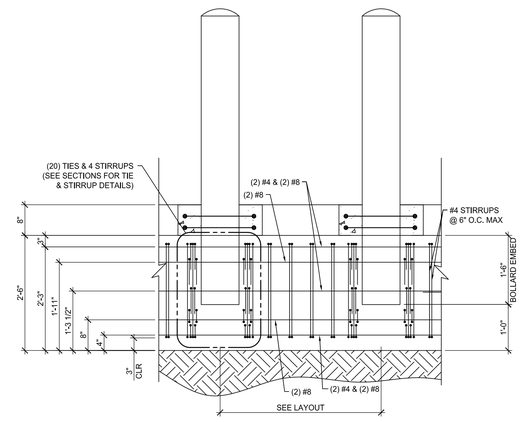
6 TYPICAL GRADE BEAM LAYOUT
SCALE: 1/2" = 1'-0"



7 TYPICAL GRADE BEAM SECTION BTWN BOLLARDS
SCALE: 3/4" = 1'-0"



8 TYPICAL GRADE BEAM SECTION @ BOLLARDS
SCALE: 3/4" = 1'-0"



9 GRADE BEAM SIDE ELEVATION
SCALE: 3/4" = 1'-0"

Revisions:	Date

2013.05.29 16:00:17-05'00'

JEFFREY A. EHLER E-7285 PROFESSIONAL STRUCTURAL ENGINEER STATE OF NEBRASKA
5-29-13

ARCHITECT/ENGINEERS:

© 2013 Calvin L. Hinz Architects P.C.
These plans are specifically designed for construction by Calvin L. Hinz Architects and are intended for no other purposes. Permission for use of this document in part or whole without written consent of Calvin L. Hinz Architects is prohibited.

CLH Calvin L. Hinz Architects

Calvin L. HINZ Architects, P.C.
3705 North 200th Street
Elkhorn, Nebraska 68022
Phone:402.291.6941 Fax: 402.291.9193

FARRIS ENGINEERING
OMAHA | LINCOLN | DES MOINES | COLORADO SPRINGS
farris-uso.com

InfraStructure, LLC
ENGINEERING CONSULTING GROUP

Drawing Title: FORCE PROTECTION LAYOUT & DETAILS

Project Title: UPGRADE FORCE PROTECTION FRONT ENTRANCE

Location: VAMC Omaha Nebraska

CONTRACT DOCUMENTS (CD-3) FINAL SUBMITTAL (100%)

Date	Checked	Drawn
MAY 10, 2013	CLH	

Project Number: 636-13-126
Building Number: ONE
Drawing Number: S1.1
Dwg. 11 of 18

Office of Construction and Facilities Management
Department of Veterans Affairs